

REMARKS

Applicants appreciate the detailed examination evidenced by the Official Action mailed October 9, 2002 (hereinafter the Official Action). Applicants have amended the independent claims to further clarify the patentable subject matter recited therein. For example, independent Claim 1 has been amended to recite in part:

establishing a first connection between the client application and a server application, wherein the server application provides updated **legacy host** screen information to the client application in response to requests from the client application, wherein the updated legacy host screen information is based on information **formatted for a character terminal of a host legacy system**;

Independent Claims 8, 12, 19, 23, 30, and 34 have been amended to include similar recitations. Applicants have also amended several of the dependent claims to ensure proper antecedent basis for the recitations thereof in view of the amendments made to the independent claims.

Applicants respectfully submit the cited references, either singularly or in combination, do not disclose or suggest the recitations of the pending claims for at least the reasons discussed herein. Accordingly, Applicants respectfully request the withdrawal of all rejections and the allowance of all claims.

The amended independent claims are patentable over Nakabayashi.

Claims 1, 6 – 8, 11, 12, 17 – 19, 22, 23, 28, 29, 30, 33, and 34 stand rejected under 35 U.S.C. § 102 over U.S. Patent No. 5,905,866 to Nakabayashi et al. ("Nakabayashi"). *Official Action, page 3*. As briefly discussed above, the independent claims have been amended to recite in part that "the updated host screen information is based on information **formatted for a character terminal of a legacy host system**" which is not disclosed by Nakabayashi in accordance with the requirements of § 102.

Anticipation under § 102 requires that each and every element of the claim is found in a single prior art reference. *W. L. Gore & Associates Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1554, 220 U.S.P.Q. 303, 313 (Fed. Cir. 1983). Stated another way, all material elements of a claim must be found in one prior art source. *In re Marshall*, 198 U.S.P.Q. 344 (C.C.P.A.

1978). "Anticipation under 35 U.S.C. § 102 requires the disclosure in a single piece of prior art of each and every limitation of a claimed invention." *Apple Computer Inc. v. Articulate Systems Inc.* 57 USPQ2d 1057, 1061 (Fed. Cir. 2000). A finding of anticipation further requires that there must be no difference between the claimed invention and the disclosure of the cited reference as viewed by one of ordinary skill in the art. *See Scripps Clinic & Research Foundation v. Genentech Inc.*, 927 F.2d 1565, 1576, 18 U.S.P.Q.2d 1001, 1010 (Fed. Cir. 1991). Additionally, the cited prior art reference must be enabling, thereby placing the allegedly disclosed matter in the possession of the public. *In re Brown*, 329 F.2d 1006, 1011, 141 U.S.P.Q. 245, 249 (C.C.P.A. 1964). Thus, the prior art reference must adequately describe the claimed invention so that a person of ordinary skill in the art could make and use the invention.

As understood by Applicants, Nakabayashi relates to the management of updated web pages, not to the display of information formatted for a **character terminal of a legacy host system** as recited in the amended independent claims. For example, the portions of Nakabayashi cited in the Official Action in support of the rejections highlight that Nakabayashi relates to the management of hypertext:

As discussed previously, the access management unit reads the **hypertext data** from the database 410 via the data management unit and utilizes the function of the browser to display the data on the screen of the monitor 76 via the user I/F unit 200. The user can sequentially look at the **respective pages** according to the links off line, in the same manner as that carried out on line. In the example of FIG. 35(a), the access management unit first displays the **home page** and then jumps to the linked pages A, B, and C, and further to the subsequent **linked pages**. A link to a non-accessed **Web server** is not rewritten but remains unchanged, so that the user can look at the data on line. This structure enables the user to read the contents of data without being specifically conscious of the position of the data. *See Nakabayashi, column 44, lines 1 – 44.* [Emphasis added.]

As shown by the above emphasized portions of the cited passage, Nakabayashi discusses the management of hypertext data which is associated with Web pages, not information formatted for a character terminal of a legacy host system as recited in the amended independent claim. As further evidence, Figure 34 (referred to by the cited passage

of Nakabayashi) shows a segment of HTML code which is commonly referred to as hypertext data.

In contrast, to the type of information (*i.e.*, hypertext) discussed in Nakabayashi, the information discussed in the present application (and recited in the claims) is the type of information which is typically provided to a character terminal, such as a dumb terminal. Character terminals typically accept ASCII code characters over, for example, a serial communications interface. The ASCII characters are interpreted based on the code and are displayed on a display associated with the character terminal as shown, for example, in Figure 6 of the present application.

As further discussed in the present application, the information is **formatted for** a character terminal of a legacy host system:

Field 1: position="1042" length="26" protected="true"
numeric="true" hidden="false" reset="false" modified="false"
text="Li, Michael C.T"

Field 2: position="1069" length="1" protected="false"
numeric="false" hidden="false" reset="false" modified="false"
underscore="true" color="cyan" text=""

Field 3: position="1072" length="5" protected="false"
numeric="false" hidden="false" reset="false" modified="false"
text="Reg"

Field 4: position="1078" length="8" protected="false"
numeric="false" hidden="false" reset="false" modified="false"
color="cyan" text="4095"

Field 5: position="1087" length="33" protected="false"
numeric="false" hidden="false" reset="false" modified="false"
text="IBMUSM3." *Application, page 11, lines 7 - 25.*

As shown by the above cited passage of the present application, the information recited in the claims is formatted for a character terminal.

Moreover, as discussed in the present application, the above-cited information is **translated into html:**

The fields included in the updated host screen information are translated to HTML, as shown below, to provide the formatted updated hosts screen information. It will be understood that fields included in the updated hosts screen information that are not recognized by the application 130 can be ignored.

[illegible]

In view of the above, the updated host screen information is different from the HTML code discussed in Nakabayashi, as the updated host screen information **is translated into HTML**.

The independent claims have been further amended to further clarify that the updated host screen information recited therein is updated **legacy** host screen information. For example, as discussed in the application:

According to FIG. 1, a server 110 provides terminal emulation sessions for a client application 115 to a host system 105 that runs legacy host applications. The host system 105 generates output in the form of host datastreams 120 that include host screen information such as tables, paragraphs of data and the like which can appear as part of a host screen 121. The host datastreams 120, including host screen information, are transmitted to the server 110. *Application page 5, lines 24 – 29.*

As demonstrated by the above passage of the application, the updated host screen information is generated by a **legacy** host system (which runs legacy host applications). As understood by Applicants, Nakabayashi does not discuss any aspect of legacy host systems.

Nakabayashi does not disclose all the recitations of the amended independent claims which renders these claims patentable over Nakabayashi for at least the reasons discussed herein. Furthermore, dependent claims 2 – 7, 9 – 11, 13 – 18, 20 – 22, 24 – 29, 31 – 33, and 35 – 36 are patentable at least per the patentability of the amended independent claims.

The amended claims are patentable over Nakabayashi and Butts.

The dependent claims stand rejected under 35 U.S.C. § 103 over Nakabayashi in view of U.S. Patent No. 5,754,830 to Butts et al. ("Butts"). *Official Action, page 4*. Applicants respectfully submit that the amended claims are patentable over Nakabayashi. Even if these references were combined, the combination would not disclose or suggest all of the recitations of the claims and further, there is no clear and particular evidence of a motivation or suggestion to combine these references as required under § 103.

To establish a *prima facie* case of obviousness, the prior art reference or references when combined must teach or suggest *all* the recitations of the claim. M.P.E.P. § 2143. As discussed above in reference to the amended independent claims, Nakabayashi relates to the monitoring Web pages. Although the Official Action correctly points out that Nakabayashi does not disclose at least a monitor application having notification code, Applicants further submit that Butts also does not disclose or suggest this and other recitations of the amended claim.

Although Butts does appear to relate to legacy host systems, there is no discussion in Butts of how the terminal emulation for the legacy host systems actually operates. For example, Butts does not appear to disclose or suggest the recitations of:

receiving a notification of the availability of updated legacy host screen information via the second connection at the monitor application;

requesting the updated legacy host screen information over the first connection responsive to receiving the notification...

Amended independent Claim 1.

To the contrary, Butts appears to discuss only the existence of connections between the components discussed therein, and does not appear to describe the specific operation of the different components which are connected. For example, the passage of Butts cited by the Official Action in support of the rejection states that:

In step 50, a uniform resource locator (URL) associated with a legacy host system is selected from a web browser executing on a client system. The web browser can comprise a JAVA-capable NETSCAPE NAVIGATOR web browser as mentioned above. The selected uniform resource locator is received by a web/emulator server in step 52. In step 54, the web/emulator server downloads executable code for an applet process to the client system for connecting to the legacy host system. In step 56, the client system executes the applet process under the web browser. The applet process can comprise a JAVA applet for execution within a JAVA virtual machine within the NETSCAPE NAVIGATOR web browser.

In step 57, the applet process connects to a client thread executed by the web/emulator server, and the client thread connects to the legacy host system across persistent TCP/IP socket connections. In step 58, the client thread then communicates with the legacy host system across the persistent TCP/IP socket connection. This communication allows the client thread to establish and maintain a terminal connection to the legacy host system. In step 60, the client thread communicates with the applet process across a persistent TCP/IP socket connection.

Butts, column 5, lines 15, - 43.

The above-cited passage demonstrates that Butts only describes the connections between different components such as the connection between the applet process and the client thread executed on the Web/emulator server. In other words, although Butts appears to describe the existence of an applet process, a client thread, and a connection therebetween, there does not appear to be any discussion in Butts that discloses or suggests the specific recitations cited above from the independent claims. For example, Butts appears to simply state that the client thread communicates with the applet across a persistent TCP/IP socket connection. As understood by Applicants, this statement does not disclose or suggest, for example:

receiving a notification of the availability of updated legacy host screen information via the second connection at the monitor application;
requesting the updated legacy host screen information over the first connection responsive to receiving the notification.

Accordingly, even if Nakabayashi and Butts were combined, the combination would not disclose or suggest all the recitations of the claims as required under § 103.

Furthermore, there is no clear and particular evidence of a motivation or suggestion to combine these references as required under § 103. In particular, Nakabayashi does not even mention legacy host systems or providing terminal emulation for those systems whereas Butts appears to relate entirely to terminal emulation for legacy host systems. Accordingly, there is no clear and particular evidence of a motivation or suggestion to combine these references as they appear to solve completely different problems.

Furthermore, the Official Action has not cited any particular evidence of why one of ordinary skill in the art would have been motivated to combine these particular references. To the contrary, it appears that the Official Action simply states that Butts and Nakabayashi are analogous or similar to one another so that one of ordinary skill in the art would have "readily recognized" the desirability and advantages of modifying Nakabayashi by employing the well known features of an applet for update. *Official Action, page* Respectfully, this is the type of conclusory reasoning which is generally forbidden by the case law and sections of the MPEP cited above.

The dependent claims are patentable over Nakabayashi and Butts for at least these additional reasons. Accordingly, Applicants respectfully request the withdrawal of all rejections and the allowance of all claims.

CONCLUSION

Applicants have amended the independent claims to further clarify that the present invention relates to terminal emulation for host legacy systems and that the information is formatted for character terminals. Applicants have shown that Nakabayashi does not disclose all the recitations of the independent claims and that the claims are patentable over Nakabayashi and Butts. Accordingly, Applicants respectfully request the withdrawal of all rejections and the allowance of all claims in due course. If any informal matters arise the

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Examiner is encouraged to contact the undersigned by telephone at (919) 854-1400 respectfully submitted.

Respectfully submitted,


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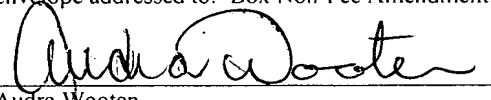


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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Box Non-Fee Amendment Commissioner for Patents, Washington, DC 20231, on January 9, 2003.


Audra Wooten
Date of Signature: January 9, 2003

VERSION WITH MARKINGS TO SHOW CHANGES MADE

Sir:

The following is an addendum to the concurrently filed amendment in response to an Official Action dated October 9, 2002 in the above referenced application. This addendum includes a marked-up version of the changes made to the claims by the present amendment.

In the Claims:

Claims 1, 3, 4, 5, 7, 8, 10, 11, 12, 14, 15, 18, 19, 21, 22, 23, 25, 26, 27, 29, 30, 32, 33 and 34 have been amended as follows:

1. (Amended) A method of providing updated legacy host screen information to a client application, the client application utilizing a request-response communications model, the method comprising:

establishing a first connection between the client application and a server application, wherein the server application provides updated legacy host screen information to the client application in response to requests from the client application, wherein the updated legacy host screen information is based on information formatted for a character terminal [display] of a host legacy system;

establishing a second connection between a monitor application and the server application;

receiving a notification of the availability of updated legacy host screen information via the second connection at the monitor application;

requesting the updated legacy host screen information over the first connection responsive to receiving the notification;

receiving the requested updated legacy host screen information at the client application; and

displaying the received updated host screen information utilizing the client application.

3. (Amended) The method of Claim 2, wherein the notification code is provided with updated legacy host screen information, the method further comprising the steps of:
extracting the notification code from the host screen information; and
executing the notification code.

4. (Amended) The method of Claim 2, wherein the updated legacy host screen information comprises a Markup Language.

5. (Twice Amended) The method of Claim 1, wherein the updated legacy host screen information comprises terminal emulation information.

7. (Amended) The method of Claim 1, wherein the server application provides updated legacy host screen information to a second client application in response to requests from the second client application, the method further comprising:
identifying the client application that requested the updated legacy host screen information.

8. (Twice Amended) A method of providing updated legacy host screen information to a client application, the client application utilizing a request-response communications model, the method comprising:

establishing a first connection between the client application and a server application, wherein the server application provides updated legacy host screen information to the client application in response to requests from the client application, wherein the updated legacy host screen information is based on information formatted for a character terminal [display] of a legacy host system;

establishing a second connection between a monitoring application and the server application;

receiving updated legacy host screen information from [a] the legacy host system;

transmitting a notification of the availability of updated legacy host screen information to the monitoring application over the second connection responsive to receiving the updated legacy host screen information;

receiving a request for the updated legacy host screen information from the client application over the first connection; and

transmitting the received updated legacy host screen information to the client application over the first connection in response to receiving the request for the updated legacy host screen information from the client application.

10. (Amended) The method of Claim 9, wherein the step of transmitting the received updated legacy host screen information further comprises the step of incorporating the notification code in the updated legacy host screen information transmitted to the client application.

11. (Amended) The method of Claim 8, wherein the server application provides updated legacy host screen information to a second client application in response to requests from the second client application, the method further comprising:

identifying the client application that requested the updated legacy host screen information.

12. (Twice Amended) A system of providing updated legacy host screen information to a client application, the client application utilizing a request-response communications model, the system comprising:

means for establishing a first connection between the client application and a server application, wherein the server application provides updated legacy host screen information to the client application in response to requests from the client application, wherein the updated legacy host screen information is based on information formatted for a character terminal [display] of a legacy host system;

means for establishing a second connection between a monitor application and the server application;

means for receiving a notification of the availability of updated legacy host screen information via the second connection at the monitor application;

means for requesting the updated legacy host screen information over the first connection responsive to receiving the notification;

means for receiving the requested updated legacy host screen information at the client application; and

means for displaying the received updated legacy host screen information utilizing the client application.

14. (Amended) The system of Claim 13, wherein the notification code is provided with updated legacy host screen information, the system further comprising:

means for extracting the notification code from the host screen information; and

means for executing the notification code.

15. (Amended) The system of Claim 13, wherein the updated legacy host screen information comprises a Markup Language.

18. (Amended) The system of Claim 12, wherein the server application provides updated legacy host screen information to a second client application in response to requests from the second client application, the system further comprising:

means for identifying the client application that requested the updated legacy host screen information.

19. (Twice Amended) A system of providing updated legacy host screen information to a client application, the client application utilizing a request-response communications model, the system comprising:

means for establishing a first connection between the client application and a server application, wherein the server application provides updated legacy host screen information to the client application in response to requests from the client application, wherein the

updated legacy host screen information is based on information formatted for a character terminal [display] of a legacy host system;

means for establishing a second connection between a monitoring application and the server application;

means for receiving updated legacy host screen information from [a] the legacy host system;

means for transmitting a notification of the availability of updated legacy host screen information to the monitoring application over the second connection responsive to receiving the updated legacy host screen information;

means for receiving a request for the updated legacy host screen information from the client application over the first connection; and

means for transmitting the received updated legacy host screen information to the client application over the first connection in response to receiving the request for the updated legacy host screen information from the client application.

21. (Amended) The system of Claim 20, wherein the means for transmitting the received updated legacy host screen information further comprises means for incorporating the notification code in the updated legacy host screen information transmitted to the client application.

22. (Amended) The system of Claim 19, wherein the server application provides updated legacy host screen information to a second client application in response to requests from the second client application, the system comprising:

means for identifying the client application that requested the updated legacy host screen information.

23. (Twice Amended) A computer program product that provides updated legacy host screen information to a client application, the client application utilizing a request-response communications model, the computer program product comprising:

a computer-readable storage medium having computer-readable program code means embodied in said medium, said computer-readable program code means comprising:

computer readable program code means for establishing a first connection between the client application and a server application, wherein the server application provides updated legacy host screen information to the client application in response to requests from the client application, wherein the updated legacy host screen information is based on information formatted for a character terminal [display] of a legacy host system;

computer readable program code means for establishing a second connection between a monitor application and the server application;

computer readable program code means for receiving a notification of the availability of updated legacy host screen information via the second connection at the monitor application;

computer readable program code means for requesting the updated legacy host screen information over the first connection responsive to receiving the notification;

computer readable program code means for receiving the requested updated legacy host screen information at the client application; and

computer readable program code means for displaying the received updated legacy host screen information utilizing the client application.

25. (Amended) The computer program product of Claim 24, wherein the notification code is provided with updated legacy host screen information, the computer program product further comprising:

computer readable program code means for extracting the notification code from the host screen information; and

computer readable program code means for executing the notification code[.].

26. (Amended) The computer program product of Claim 24, wherein the updated legacy host screen information comprises a Markup Language.

27. (Amended) The computer program product of Claim 23, wherein the updated legacy host screen information comprises terminal emulation information.

29. The computer program product of Claim 23, wherein the server application provides updated legacy host screen information to a second client application in response to requests from the second client application, the computer program product further comprising:

computer readable program code means for identifying the client application that requested the updated legacy host screen information.

30. (Twice Amended) A computer program product of providing updated legacy host screen information to a client application, the client application utilizing a request-response communications model, the computer program product comprising:

a computer-readable storage medium having computer-readable program code means embodied in said medium, said computer-readable program code means comprising:

computer readable program code means for establishing a first connection between the client application and a server application, wherein the server application provides updated legacy host screen information to the client application in response to requests from the client application, wherein the updated legacy host screen information is based on information formatted for a character terminal display;

computer readable program code means for establishing a second connection between a monitoring application and the server application;

computer readable program code means for receiving updated legacy host screen information from a host system;

computer readable program code means for transmitting a notification of the availability of updated legacy host screen information to the monitoring application over the second connection responsive to receiving the updated legacy host screen information;

computer readable program code means for receiving a request for the updated legacy host screen information from the client application over the first connection; and

computer readable program code means for transmitting the received updated legacy host screen information to the client application over the first connection in response to receiving the request for the updated legacy host screen information from the client application.

32. (Amended) The computer program product of Claim 31, wherein the computer readable program code means for transmitting the received updated legacy host screen information further comprises:

computer readable program code means for incorporating the notification code in the updated legacy host screen information transmitted to the client application.

33. (Amended) The computer program product of Claim 30, wherein the server application provides updated legacy host screen information to a second client application in response to requests from the second client application, the computer program product comprising:

computer readable program code means for identifying the client application that requested the updated legacy host screen information.

34. (Twice Amended) A system for displaying updated legacy host screen information utilizing a web browser, comprising:

a host server application;

a browser application configured to communicate with the host server application;

a first connection configured to provide communication between the host server application and the browser application;

a notification application operably associated with the browser application that notifies the browser application to request updated legacy host screen information from the host server application for display by the browser application, wherein the updated legacy host screen information is based on information formatted for a character terminal display; and

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a second connection, established by the notification application, configured to provide communication between the host server application and the notification application.

****END****